

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA
DOCKET NO. 2018-3-E**

In the Matter of)	
Annual Review of Base Rates)	DIRECT TESTIMONY OF
for Fuel Costs for)	JASON D. MARTIN FOR
Duke Energy Carolinas, LLC)	DUKE ENERGY CAROLINAS, LLC
)	

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Jason D. Martin and my business address is 40 West Broad Street, Suite 690,
3 Greenville, SC 29601.

4 **Q. BY WHOM AND IN WHAT CAPACITY ARE YOU EMPLOYED?**

5 A. I am Director of Strategy, Policy, and Strategic Investment for South Carolina in the
6 Distributed Energy Technology group at Duke Energy Corporation. I am responsible for
7 the development and execution of strategy and policy support related to distributed
8 energy technology for Duke Energy's retail franchises, including Duke Energy Progress,
9 LLC ("DEP" or the "Company") and Duke Energy Carolinas, LLC ("DEC," together
10 with DEP, the "Companies"). This includes evaluation of legislation and regulation, and
11 implementation of customer programs such as those associated with Act 236 (the "Act"),
12 the South Carolina Distributed Energy Resource Act of 2014.

13 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
14 **WORK EXPERIENCE.**

15 A. I received a Bachelor of Science degree in Electrical and Computer Engineering at North
16 Carolina State University. I have been employed at Duke Energy since 1987 working in
17 the areas of Engineering, Customer Services, Large Account Management, and
18 Distributed Energy Technologies.

19 **Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION BEFORE?**

20 A. Yes. I testified before this Commission in DEC's 2017 annual fuel clause proceeding in
21 Docket No. 2017-3-E.

22 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. The purpose of my testimony is to provide support for the Distributed Energy Resource Program (“DERP”) costs that are incorporated into the proposed fuel factors prepared by Witness McGee. I will describe the nature of costs filed as well as any changes made to the DERP portfolio since the 2017 fuel proceeding.

Q. PLEASE DESCRIBE THE LEVELS OF SOLAR ADOPTION DEC HAS EXPERIENCED SINCE THE IMPLEMENTATION OF ACT 236.

A. Since January 1, 2015, DEC has seen significant growth in solar adoption as shown below in Table 1. The Company has encouraged solar adoption through the Net Energy Metering incentive, Solar Rebate Program, and other DERP efforts discussed later in my testimony.

Table 1: Duke Energy Carolinas Solar Adoption, as of June 30, 2018¹

	ACT 236 Goal	Capacity Installed	Capacity Under Contract ³	% of Goal
Utility Scale Solar (1MW – 10MW)	40	-	10.6	27%
Customer Scale Solar (<1MW) ²	40	63.3	-	158%
Small Scale Solar (<20kW)	10	43.2	-	432%

Notes:

1. All values in MW-AC

2. Customer Scale Solar is inclusive of Small Scale Solar

3. Capacity under contract is defined as those having an executed Purchase Power Agreement and does not apply to Customer Scale or Small Scale Solar.

Q. PLEASE DESCRIBE THE DERP COSTS THAT ARE INCLUDED IN THE REVIEW, FORECAST, AND BILLING PERIODS.

A. Pursuant to Commission Order No. 2015-515, the Company offers its customers a variety of programs to support solar development. As a result, the Company incurred DERP incremental and avoided costs totaling \$8,219,258 in the period from June 1, 2017 through May 31, 2018 (the “review period”); anticipates incurring \$3,608,220 during the period June 1, 2018 through September 30, 2018 (the “forecast period”); and projects to

1 incur \$12,215,510 in the period October 1, 2018 through September 30, 2019 (the
2 “billing period”).

3 These costs represent the avoided and incremental costs associated with the Company’s
4 approved DERP offerings, including 1) Purchased Power Agreements executed to fulfill
5 the Company’s utility-scale solar goals under Act 236; 2) Distributed Energy Resource
6 (“DER”) Net Energy Metering (“NEM”) Incentive; 3) Solar Rebate Program; 4) Shared
7 Solar Program; 5) Carrying Costs on Deferred Amounts; 6) NEM Avoided Capacity
8 Costs; 7) NEM Meter Costs; and 8) General and Administrative Expenses, including
9 incremental labor costs as a direct result of DERP, IT and billing enhancements, and
10 other administrative costs associated with delivering these programs to customers. Table
11 2 is an itemization of actual and expected DERP costs.

Table 2: DEC DERP Cost Summary – Review, Forecast, and Billing Periods

Cost Type	Review Period	Forecast Period	Billing Period
	6/17-5/18	6/18-9/18	10/18-9/19
<u>DERP Incremental Costs</u>			
Purchased Power Agreements	\$ -	\$ -	\$ 11,823
DER NEM Incentive	\$ 2,415,068	1,301,494	4,432,004
Solar Rebate Program - Amortization	2,318,266	915,697	3,041,232
Shared Solar Program	-	-	33,770
Carrying Costs on Deferred Amounts	2,247,455	889,731	2,834,420
NEM Avoided Capacity Costs	262,606	147,570	523,321
NEM Meter Costs	348,449	181,158	671,247
General and Administrative Expenses	580,606	170,933	346,041
Total DER Incremental Costs	\$ 8,172,449	\$ 3,606,584	\$ 11,893,858
<u>DERP Avoided Cost - Energy & Capacity</u>			
Purchased Power Agreements	\$ 46,809	\$ 1,636	\$ 132,041
Shared Solar Program	-	-	\$ 189,611
Total DERP Avoided Cost	\$ 46,809	\$ 1,636	\$ 321,652

Source: McGee Exhibit 8, 10 and 13

Q. PLEASE DESCRIBE THE COMPANY'S DER NEM INCENTIVE.

A. The DER NEM Incentive is a credit available to eligible net energy metering customers that enables the customer to receive a full retail rate compensation for each kilowatt-hour (kWh) generated by their solar facility.

The DER NEM Incentive approximates the difference between (a) the value of a NEM Distributed Energy Resource, as computed using the methodology approved in Docket No. 2014-246-E, and (b) the utility's retail rate for that customer. Settling Parties in Docket No. 2014-246-E agreed that the DER NEM Incentive shall be treated as an incremental cost, as defined in S.C. Code Ann. § 58-39-140, effectively socializing the cost of the DER NEM Incentive to all retail customers as a component of the utilities' respective DER programs. In accordance with the settlement agreement reached in

1 Docket No. 2014-246-E, the NEM Incentive is available to new customers until the
2 expiration of the settlement agreement or the statutory capacity cap on NEM as set forth
3 in Act 236 is met, whichever occurs first.

4 **Q. PLEASE DESCRIBE THE GROWTH OF CUSTOMER PARTICIPATION IN**
5 **NET ENERGY METERING?**

6 A. Act 236 requires the Company make NEM available to customer-generators until the
7 total nameplate generating capacity of NEM customer-generators that have applied for
8 generator interconnection service equals two percent of the Company's South Carolina
9 retail peak demand, which is approximately 80,000 kW (AC). Participation in net energy
10 metering has increased significantly since 2015 as a result of the decrease in the
11 acquisition costs of solar, in addition to the availability of the Company's Solar Rebate
12 Program and the NEM Incentive. On July 9, 2018, the Company reached the statutory
13 cap set forth in Act 236, measured by (1) the capacity of connected net metering
14 facilities; and (2) the capacity of those who have applied for generator interconnection
15 service and requested to participate in net energy metering, but have yet to interconnect
16 their system. Table 3 details total NEM participation as of July 22, 2018.

17 Customers may continue to apply for generator interconnection service and request to
18 participate in net energy metering service until July 31, 2018. After this date, customers
19 who wish to install solar on their premises may sell the power that they generate back to
20 the Company pursuant to DEC's Schedule PP for Purchased Power. In such instance, the
21 customer and the Company will enter into a Purchased Power Agreement, which is a
22 separate agreement from their electric service agreement with the Company.

Table 3: DEC Net Energy Metering – Total Participation

Rider RNM	As of 7/22/2018
Target (MW-AC)	80 (MW-AC)
Connected	63 (MW-AC)
In Queue ¹	18 (MW-AC)
Remaining Capacity	0 (MW-AC)
Accepted Over Target	1 (MW-AC)
Total Customers to Date	6,080

Notes:

1. In-Queue reflects the total amount of applications received.

Q. PLEASE DESCRIBE THE COSTS OF THE DER NEM INCENTIVE.

A As shown on the “DER NEM Incentive” line in Table 2 above, the total costs associated with this incentive are expected to grow significantly in the Billing Period. This growth is attributed to increase in interconnected, operational facilities during the period. Table 4, below, depicts the number of customers (and the associated kilowatts (kW-AC)) who have or are expected to energize their solar facilities and participate in net metering.

Table 4: DEC Net Energy Metering Capacity Connected – Review, Forecast, Billing¹

Rider RNM-3 and Rider NM-SC	Review Period	Forecast Period	Billing Period
	6/17-5/18	6/18-9/18	10/18-9/19
Capacity (kW-AC)	61,636	71,738	80,092
# of Customers	5,136	5,878	5,901

Notes:

1. Table 4 assumes 80,000 kW(AC) of connected capacity is achieved in March of 2019, and no additional capacity is interconnected during the remainder of the Billing Period.

Rider NM-SC refers to the Company’s legacy net metering rider available from 2008-2015; Rider NM-SC closed to new customers when Rider RNM was made available. In late 2015, all customers who had previously elected Rider NM-SC were contacted by the

1 Company and encouraged to switch to Rider RNM due to the fact that Rider NM expires
2 in 2020¹ and Rider NMR expires in 2025.²

3 **Q. HOW HAS THE COMPANY COMMUNICATED THE AVAILABILITY OF NET**
4 **ENERGY METERING TO CUSTOMERS AND EXTERNAL STAKEHOLDERS?**

5 A. The Company publicly announced the achievement of the net energy metering statutory
6 cap on July 12, 2018, posting the details to the Duke Energy website and emailing an
7 external group of rooftop solar installers the same day (a list of 241 email addresses).
8 Additionally, the Company informed members of its Renewable Service Center to advise
9 any customer or rooftop solar installers inquiring about net energy metering to apply for
10 generator interconnection service prior to August 1, 2018 in order to be eligible to
11 participate in net energy metering.

12 **Q. PLEASE DESCRIBE EXHIBIT 1 TO YOUR TESTIMONY.**

13 A. Martin Exhibit 1 provides the Company's proposed 2018 net metering rider, Rider RNM.
14 The changes to the tariff are the following: (1) the updated value of NEM Distributed
15 Energy Resources as discussed in Witness Snider's testimony; and (2) revisions to the
16 availability provisions of the Rider to make clear that service under the Rider is closed to
17 new participants that have not applied for an Interconnection Agreement under a net
18 metering arrangement prior to August 1, 2018. It is not necessary to update the rate
19 under the annual credit for excess generation until a new Purchased Power Schedule is
20 approved.

¹ See S.C. Code Ann § 58-40-20(A) (generators whose net energy metering facilities were energized prior to the availability of net energy metering rates approved by the commission under the terms of this chapter may remain in historic net energy metering programs through December 31, 2020).

² See Settlement Agreement in Docket No. 2014-246-E.

Q. WHY IS THE COMPANY UPDATING ITS NET METERING RIDER IF NET METERING IS NOT AVAILABLE TO APPLICANTS AFTER JULY 31, 2018?

A. Although net metering is not open to new applicants after July 31, 2018, it is still applicable to both current net metering customers as well as those customers that have applied to participate in net metering but have not yet completed their project. These customers will be affected by the changes made to the Net Metering Rider, as shown in Exhibit 1.

Q. PLEASE DESCRIBE THE STATUS OF THE COMPANY'S SOLAR REBATE PROGRAM.

A. The Company's solar rebate program was implemented to assist the Company in meeting its Customer Scale solar requirement (facilities 1,000 kW and less) under Act 236. The Company has made available two solar rebate programs for its customers: the Small Solar Rebate Program and the Large Solar Rebate Program. Both provide a qualified customer with a rebate of \$1.00 per watt-dc upon successful energization of a solar facility that conforms to the sizing requirements outlined in Act 236. As shown in Table 5, below, interest in the solar rebate, as measured by solar rebate applications received, has exceeded available capacity per Act 236 goals.

Table 5: Duke Energy Carolinas Solar Rebate Program Status, as of June 1, 2018

Solar Facility Size	ACT 236 Goal	Total Capacity of Rebate Applications Received	Total Capacity of Rebate Applications Accepted into the Rebate Program
"Small" - Up to 20kW-AC	At least 10,000 kW	17,500 kW	15,000 kW
"Large" - 20.01kW-AC - 1,000kW-AC	30,000 kW	37,500 kW	25,000 kW
Total	40,000 kW	55,000 kW	40,000 kW

*All Values in kW-AC

1 As a result of applications in excess of available capacity, all applications received after
2 November 15, 2016 were placed on a waiting list, and the program was closed to new
3 applications on January 27, 2017.

4 **Q. PLEASE DESCRIBE THE DERP COSTS ASSOCIATED WITH THE**
5 **COMPANY'S SOLAR REBATE PROGRAM.**

6 A. The incremental costs associated with the Solar Rebate Program and included in this
7 filing are the amortization of rebates paid, carrying costs on deferred amounts, and
8 general and administrative expenses required to manage the program, as shown in Table
9 2.

10 **Q. PLEASE PROVIDE AN OVERVIEW AND STATUS OF THE COMPANY'S**
11 **SHARED SOLAR PROGRAM.**

12 A. The Company's Shared Solar Program is a means for multiple retail customers to
13 subscribe to and share in the economic benefits of one renewable energy facility.
14 Customers will be able to apply to the program using an online application which shows
15 real-time capacity available in the program and assists them in determining their
16 appropriate subscription size. Once enrolled, in addition to their regular energy bill,
17 participants also pay a monthly subscription fee. That fee funds their share of supporting
18 a centrally-located solar energy facility. In exchange, they will receive a monthly credit
19 from the Company equal to the amount of solar energy their share of the solar facility
20 produced. An enrolled customer portal will be available, allowing customers to view
21 production and track bill credits earned. Also, in order to increase accessibility to the
22 program, DEC will also offer a low income component of the program, through which

1 DEC will waive the application fee and initial fee (a \$120 value) for 200 low income
2 qualified customers.

3 In recent months, the Company has executed two Purchase Power Agreements for a total
4 of 3MW, the power from which will be available for shared solar participants. The
5 program will begin taking reservations in the fourth quarter of 2018 based on the
6 expectation that these facilities will achieve commercial operation in December 2018.

7 **Q. HOW ARE YOU COMMUNICATING THE UPCOMING AVAILABILITY OF**
8 **THE SHARED SOLAR PROGRAM WITH CUSTOMERS?**

9 A. The Company is planning a number of outreach activities in order to communicate the
10 upcoming availability of the Shared Solar Program. The Company will utilize events in
11 the community, through partnership with the solar facility developer(s) and Community
12 Action Partnerships to reach customers. The Company is also working with these
13 Community Action Partnerships to qualify applicants and complete applications for the
14 low income portion of the program. A media release as well as targeted email and direct
15 mail campaigns are also planned in addition to these events.

16 **Q. PLEASE DESCRIBE THE DERP COSTS ASSOCIATED WITH THE**
17 **COMPANY'S SHARED SOLAR PROGRAM.**

18 A. The incremental costs associated with the Shared Solar Program, as set forth in Table 2,
19 are limited to the shared solar incentive, and general and administrative expenses,
20 including labor and IT project costs required to adapt the Company's database and billing
21 systems to the Shared Solar transaction.

22 **Q. PLEASE DESCRIBE THE RESULTS OF THE COMPANY'S REQUEST FOR**
23 **PROPOSALS (RFP) OF UTILITY-SCALE SOLAR FACILITIES.**

1 A. In the fall of 2015, the Company solicited competitive bids from solar PV facilities for a
2 total of 40,000kW (AC), the equivalent of one percent of the Company's estimated South
3 Carolina retail peak demand. This solicitation resulted in 23 projects totaling 135MW
4 being placed on a short list in March of 2016. Since that time 11 projects totaling 53MW
5 have withdrawn from the generator interconnection process and therefore are no longer
6 viable projects. From the results of this RFP, the Company has executed five Purchase
7 Power Agreements for a total of 10.6MW, as shown in Table 1, and continues to evaluate
8 other projects that bid into the RFP. To increase the number of projects that DEC may
9 evaluate for the utility-scale goal, the Company is planning to release an additional RFP
10 in early August to allow additional projects to compete for the contracts that DEC will
11 award under Act 236. The Company continues to evaluate other projects resulting from
12 the 2015 RFP for viability in contributing to the utility-scale solar goal of Act 236.

13 **Q. PLEASE DESCRIBE THE DERP COSTS ASSOCIATED WITH THE**
14 **COMPANY'S REQUEST FOR PROPOSALS OF UTILITY-SCALE SOLAR**
15 **FACILITIES.**

16 A. The incremental costs associated with the RFP of utility-scale solar facilities, as set forth
17 in Table 2, are for Purchased Power Agreements, and general and administrative
18 expenses, including labor to conduct the RFP and negotiate agreements.

19 **Q. PLEASE DESCRIBE THE COMPANY'S EFFORTS TO COMMUNICATE WITH**
20 **STAKEHOLDERS ABOUT DER PROGRAMS AND PROGRAM CHANGES IN**
21 **THE PAST YEAR.**

22 A. Since the Commission approved the Company's DER Program application in 2015, the
23 Company has utilized various communication and outreach tools to ensure that solar

1 stakeholders and retail customers have access to information about the Company's
2 programs and are able to communicate with representatives from the Company about the
3 programs. For example, the Company has: 1) conducted quarterly DER Collaborative
4 meetings with a diverse group of stakeholders representing the environmental
5 community, low income community, solar installers, solar developers, The Alliance for
6 Solar Choice, SolarCity, Sunrun, Walmart, Nucor, and the Office of Regulatory Staff; 2)
7 conducted multiple educational sessions for solar installers and developers at meetings of
8 the South Carolina Solar Council; 3) provided information specific to the Shared Solar
9 Program at a meeting of the South Carolina Clean Energy Business Alliance; 4) provided
10 a summary of net metering adoption on the Duke Energy website; 5) delivered detailed
11 communication around the achievement of the net energy metering statutory cap as
12 described in previously; and 6) provided call center support to retail customers and solar
13 installers via its Renewable Service Center, which is staffed with approximately twenty
14 professionals. The Company uses these outreach efforts as well as regular communication
15 to keep stakeholders and retail customers informed of the status of the program offerings
16 and other developments related to its DER programs.

17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 **A.** Yes.

RIDER RNM (SC)
RENEWABLE NET METERINGAVAILABILITY

Available to residential and nonresidential Customers receiving concurrent service from the Company, on a metered rate schedule, except as indicated under General Provisions. The renewable net energy metered (NEM) generation, which includes a solar photovoltaic; solar thermal; wind powered; hydroelectric; geothermal; tidal or wave energy; recycling resource; hydrogen fueled or combined heat and power derived from renewable resources; or biomass fueled generation source of energy, is installed on the Customer's side of the delivery point, for the Customer's own use, interconnected with and operated in parallel with the Company's system. The generation must be located at a single premises owned, operated, leased or otherwise controlled by the Customer. The system may either be owned by the Customer or by a lessor and leased to the Customer.

Service under this Rider is closed to new participants ~~on and after January 1, 2021, or when the statutory minimum system capacities described in S.C. Code § 58-39-130 have been reached, whichever occurs first~~that have not applied for an Interconnection Agreement under a net metering arrangement on or before July 31, 2018. Customers requesting NEM service after January 1, 2021, will receive service in accordance with the NEM tariff in effect at that time. This Rider shall expire and no longer be available for NEM service on and after January 1, 2026.

GENERAL PROVISIONS

1. To qualify for service under this Rider, the Customer must comply with all applicable interconnection standards and must provide, in writing, the Nameplate Capacity of the Customer's installed renewable generation system. Any subsequent change to the Nameplate Capacity must be provided by the Customer to the Company in writing by no later than 60 days following the change.
2. To qualify for service under this Rider, a residential Customer may be served on an approved residential rate schedule, but may not be served under Schedule WC or Rider NM. The Nameplate Capacity of Customer's installed generation system and equipment must not exceed 20 kW AC.
3. To qualify for service under this Rider, a nonresidential Customer may be served on an approved general service or industrial rate schedule, but may not be served on Schedules TS, BC, HP, PG, MP or Rider NM. The Nameplate Capacity of Customer's installed renewable generation system and equipment must not exceed the lesser of 1,000 kW AC or 100% of the Customer's contract demand which shall approximate the Customer's maximum expected demand.
4. If the Customer is not the owner of the premises receiving electric service from the Company, the Company shall have the right to require that the owner of the premises give satisfactory written approval of the Customer's request for service under this Rider.
5. All environmental attributes, including but not limited to "renewable energy certificates" (RECs), "renewable energy credits" or "green tags", associated with the generation system shall be conveyed to the Company until billing of a Distributed Energy Resource Program Rider DERP Charge is discontinued on all customer bills. The Customer certifies that the environmental attributes have not, and will not, be remarketed or otherwise resold for any purpose, including another distributed energy resource standard or voluntary purchase of renewable energy certificates in South Carolina or in any other state or country for the Contract Period and any successive contract periods thereto.
6. If the electricity supplied to the Customer by the Company exceeds the electricity delivered to the grid by the customer-generator during a monthly billing period, the customer-generator shall be billed for the net electricity in kilowatt hours (kWh) supplied by the Company plus any demand or other charges under the applicable rate schedule or riders. If the electricity delivered to the grid by the customer-generator exceeds the electricity in kWh supplied by the utility during a monthly billing period, the Customer-Generator shall be credited for the excess kWh generated during that billing period.
7. Electricity delivered to the grid by the Customer's renewable generation that exceeds the electricity delivered by the Company is defined as Excess Energy. When used in conjunction with a time of use schedule, the TOU periods shall be specified in the applicable schedule and any Excess Energy shall apply first with the Excess Energy generated On-Peak kWh offsetting On-peak usage and then offsetting Off-peak usage. Any excess

RIDER RNM (SC)
RENEWABLE NET METERING

Off-Peak kWh shall only apply against Off-peak kWh usage. Any Excess Energy not used in the current month to offset usage shall carry forward to the next billing month.

8. Excess Energy shall be used to reduce electricity delivered and billed by the Company during the current or a future month, except that for the March billing period any carry-over shall be compensated as described in the RATE paragraph below.
9. In the event the Company determines that it is necessary to increase the capacity of facilities beyond those required to serve the Customer's electrical requirement or to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, the Customer shall pay the estimated cost of the required transformer or other equipment above the estimated cost which Company would otherwise have normally incurred to serve the Customer's electrical requirement, in advance of receiving service under this Rider.
10. The rates set forth herein are subject to Commission Order No. 2015-194, issued in Docket No. 2014-246-E pursuant to the terms of S.C. Code § 58-40-20(F)(4). Eligibility for this rate will terminate as set forth in that Order, and otherwise as specified above. The value of NEM generation eligible for this Rider shall be computed using the methodology contained in Commission Order No. 2015-194, in Docket No. 2014-246-E, and shall be updated annually by the Company. The value of NEM generation for ~~2017-2018~~ is \$0.~~05300~~
~~05323~~ per kWh for Schedules RS, RE, ES, RT and SGS and \$0.~~05298-05310~~ for all other schedules.

RATE

All provisions of the applicable schedule and other applicable riders will apply to service supplied under this Rider, except as modified herein. For any bill month during which the Energy Charges are a net credit, the respective Energy Charges for the month shall be zero. Credits shall not offset the Basic Facilities Charge or the Demand Charge (if applicable). In addition to all charges in the applicable rate schedule for the Customer's net electrical usage, the following credit may be applicable annually:

Annual Credit for Excess Generation

If the Customer has Excess Energy after offsetting usage as of the date of the March billing, the Company shall pay the Customer for the amount of the accumulated Excess Energy times a rate of \$0.0432 per kWh, after which the amount of Excess Energy shall be set to zero.

MINIMUM BILL

The monthly minimum bill for customers receiving service under this Rider shall be no less than Basic Facilities Charge from the applicable rate schedule and riders plus, if applicable, any of the following Charges: the Demand Charge, the Economy Demand Charge, Excess Demand Charge and the Extra Facilities Charge.

METERING REQUIREMENTS

The Customer must provide access and designate a location on the load side of the billing meter for the Company to furnish, install, own and maintain metering with 30-minute interval capability to record 100% of the Customer's generator output. At the Company's sole option, the generator meter requirement may be waived for customers served under a net metering rider on or before December 31, 2015. The Company will also furnish, install, own and maintain a billing meter to measure the kWh delivered by the Company to the Customer, and to measure the net kWh purchased by the Customer or delivered to the Company. For renewable generation capacity of 20 kW AC or less, the billing meter will be a single, bi-directional meter which records independently the net flow of electricity in each direction through the meter, unless the Customer's overall electrical requirement merits a different meter. For larger renewable generation capacities, the Company may elect to require two meters with 30-minute interval capabilities to separately record the Customer's electrical consumption and the total generator output, which will be electronically netted for billing. All metering shall be at a location that is readily accessible by the Company.

RIDER RNM (SC)
RENEWABLE NET METERINGSAFETY, INTERCONNECTION AND INSPECTION REQUIREMENTS

This Rider is only applicable for installed renewable generation systems and equipment that complies with and meets all safety, performance, interconnection, and reliability standards established by the Commission, the National Electric Code, the National Electrical Safety Code, the Institute of Electrical and electronic Engineers, Underwriter's Laboratories, the Federal Energy Regulatory Commission and any local governing authorities. The Customer must comply with all liability insurance requirements of the Interconnection Standard.

POWER FACTOR

The Customer's renewable generation must be operated to maintain a 100% power factor, unless otherwise specified by Company. When the average monthly power factor of the power supplied by the Customer to the Company is other than 100%, the Company may correct the energy in kWh, as appropriate. The Company reserves the right to install facilities necessary for the measurement of power factor. The Company will not install such equipment, nor make a power factor correction if the renewable generation system is less than 20 kW and uses an inverter.

CONTRACT PERIOD

The Customer shall enter into a contract for service under this Rider for a minimum original term of one (1) year, and the contract shall automatically renew thereafter, except that either party may terminate the contract after one year by giving at least sixty (60) days prior notice of such termination in writing.

The Company reserves the right to terminate the Customer's contract under this Rider at any time upon written notice to the Customer in the event that the Customer violates any of the terms or conditions of this Rider, or operates the renewable generation system and equipment in a manner which is detrimental to the Company or any of its customers. In the event of early termination of a contract under this Rider, the Customer will be required to pay the Company for the costs due to such early termination, in accordance with the Company's South Carolina Service Regulations.